

c.) Remarks

Outstanding Restriction Requirement

Applicants respectfully traverse the Examiners classification of eight distinct inventions in the present office action. Applicants assert that the claims of Groups IV and V (claims 12-14) constitute a single invention for the reason set forth below. Applicants elect the claims of Group IV and the first Group V identified by the Examiner. Alternatively, if the Examiner is not persuaded by the arguments below, the claims of Group IV (claims 12 and 14) are elected.

Claim 12 relates to a DAOCS enzyme which is modified in the binding site for the side chain of penicillin N. Claim 13 is directed to a modified DAOCS in which the penicillin/cephalosporin binding site of the DAOCS is modified. Applicants respectfully assert that both claims relate to DAOCS that are modified within the binding site for penicillin N, either within the penicillin group binding site or within the side chain for penicillin N. Claim 12 is amended to elect an enzyme which modifies the side chain binding site of penicillin N. Claim 13 is amended to elect an enzyme which modifies the penicillin/cephalosporin binding site of penicillin N. Claim 14 is amended to elect one enzyme, a mutant of DOACS. The amendments made herein restrict the species to one enzyme. Applicants believe that these amendments should satisfy the species restriction in the present action. Applicants have added two method claims directed to the production of beta-lactams of the penicillin or cephalosporin families using the enzyme of the invention.

Applicants had previously submitted a Preliminary Amendment in the present application. In a telephone discussion with Examiner Boris on May 6, 2003, Applicants have learned that this amendment was never entered. A copy of the amendment is appended along with a copy of the return postcard evidencing the submission of the amendment. As per

Applicants discussion with Examiner Boris, those claims from the Preliminary Amendment which belong in the elected Group are currently submitted as "Added" claims. The claims have been modified to meet the restriction requirement addressed herein. As such, claims 27-43 have been added in this response. Claims 12-14 and 27-43 remain pending and under examination as of this response.

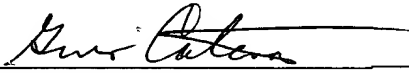
d.) Conclusions

In light of the arguments made herein, Applicants assert that the claims of Groups IV and V (claims 12-14) constitute a single invention. Applicants elect the claims of Group IV and the first Group V identified by the Examiner. Applicants respectfully request that the examiner reconsider the restriction requirement in light of the preceding arguments and examine the aforementioned claims on the merits. Alternatively, if the Examiner is not persuaded by the arguments made herein, Applicants elect the claims 12 and 14 (Group IV as defined by the Examiner), along with new claims 28-41 which correspond to the elected group. New method claims 42-43 are also added in this response.

Applicants include a payment of \$1450.00 with this filing for a 4 month extension of time. It is believed that these are the only fees due with the filing of this response. However, if Applicants are in error, the Commissioner is hereby authorized to draw any additional fees associated with this filing from Deposit Account No. 06-2375, under Order No. P02005US0/10020482, from which the undersigned is authorized to draw.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail No. EU578408122US, in an envelope addressed to Mail Stop No-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date shown below.

Date: May 16, 2003

By:  (Pamela Tincha)